

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

Date of mailing (day/month/year) 15 May 2001 (15.05.01)	
International application No. PCT/DK00/00515	Applicant's or agent's file reference P364 PC00
International filing date (day/month/year) 15 September 2000 (15.09.00)	Priority date (day/month/year) 15 September 1999 (15.09.99)
Applicant RØNVIG, Jørn et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
05 April 2001 (05.04.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  Charlotte ENGER  Telephone No.: (41-22) 338.83.38
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# TENT COOPERATION TF

**PCT**

**NOTIFICATION OF THE RECORDING  
OF A CHANGE**

(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HØIBERG APS  
St. Kongensgade 59B  
DK-1264 Copenhagen K  
DANEMARK

<b>Date of mailing (day/month/year)</b> 11 June 2001 (11.06.01)	
<b>Applicant's or agent's file reference</b> P364 PC00	<b>IMPORTANT NOTIFICATION</b>
<b>International application No.</b> PCT/DK00/00515	<b>International filing date (day/month/year)</b> 15 September 2000 (15.09.00)

<b>1. The following indications appeared on record concerning:</b> <input type="checkbox"/> the applicant <input type="checkbox"/> the inventor <input checked="" type="checkbox"/> the agent <input type="checkbox"/> the common representative		
<b>Name and Address</b> HØIBERG APS Nørre Farimagsgade 37 DK-1364 Copenhagen K Denmark	<b>State of Nationality</b>	<b>State of Residence</b>
	<b>Telephone No.</b> +45 3332 0337	
	<b>Facsimile No.</b> +45 3332 0384	
	<b>Teleprinter No.</b>	
<b>2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:</b> <input type="checkbox"/> the person <input type="checkbox"/> the name <input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence		
<b>Name and Address</b> HØIBERG APS St. Kongensgade 59B DK-1264 Copenhagen K Denmark	<b>State of Nationality</b>	<b>State of Residence</b>
	<b>Telephone No.</b> +45 3332 0337	
	<b>Facsimile No.</b> +45 3332 0384	
	<b>Teleprinter No.</b>	
<b>3. Further observations, if necessary:</b>		
<b>4. A copy of this notification has been sent to:</b> <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> the receiving Office  <input type="checkbox"/> the International Searching Authority  <input checked="" type="checkbox"/> the International Preliminary Examining Authority                         </div> <div> <input type="checkbox"/> the designated Offices concerned  <input checked="" type="checkbox"/> the elected Offices concerned  <input type="checkbox"/> other:                         </div> </div>		



<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b>  Athina Nickitas-Etienne  Telephone No.: (41-22) 338.83.38
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PTO/PCT Rec'd 15 MAR 2002 PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicants or agent's file reference <b>P364 PC00</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) <b>FOR FURTHER ACTION</b>	
International application No. <b>PCT/DK00/00515</b>	International filing date (day/month/year) <b>15/09/2000</b>	Priority date (day/month/year) <b>15/09/1999</b>	
International Patent Classification (IPC) or national classification and IPC <b>A61N5/00</b>			
Applicant <b>R NVIG A/S et al.</b>			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 9 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 5 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>			
Date of submission of the demand <b>05/04/2001</b>		Date of completion of this report <b>15.01.2002</b>	
Name and mailing address of the international preliminary examining authority:  <b>European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tlx 523656 epmu d Fax: +49 89 2399 - 4465</b>		Authorized officer  <b>Fischer, O</b>  Telephone No. +49 89 2399 2327 	

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/DK00/00515

## I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*)

Description, pages:

2-9	as originally filed	
1,1a	with telefax of	23/10/2001

Claims, No.:

1-20	with telefax of	23/10/2001
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Drawings, sheets:

1/6-6/6	as originally filed
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2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/DK00/00515

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application.
- ☒ claims Nos. 17-20.

because:

- ☒ the said international application, or the said claims Nos. 17-19 relate to the following subject matter which does not require an international preliminary examination (*specify*):  
**see separate sheet**
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the said claims Nos. 20.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the standard.
- ☐ the computer readable form has not been furnished or does not comply with the standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/DK00/00515

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**1. Statement**

Novelty (N)	Yes:	Claims	1-16
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-16
Industrial applicability (IA)	Yes:	Claims	1-16
	No:	Claims	

**2. Citations and explanations  
see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/DK00/00515

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. Claims 17-19 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT (method for treatment of the human or animal body by therapy). The method permits emission of laser light to the skin of the patient to treat muscle damages or ulcers and is therefore a therapy method. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(i) PCT).
2. No search report has been established for the subject-matter of claim 20 relating to the general use of a laser apparatus. Accordingly, no report is established for this claim.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following document:  
  
D1: GB-A-2 144 561 (CILCO INC) 6 March 1985  
D2: EP-A-0 786 837 (HEWLETT PACKARD CO) 30 July 1997
2. The subject-matter of claim 1 does not involve an inventive step within the meaning of Article 33 (3) PCT.
  - 2.1 The feature "for use in treatment of skin or mucosa of an animal including a human being" (claim 1) relates to the use of the apparatus and does not define technical features thereof. It is interpreted as meaning merely "suitable for use in treatment of skin or mucosa of an animal including a human being" (see PCT Guidelines III-4.8).

Moreover, the feature "said surface being skin or mucosa" (claim 1) defines features of an object which is not part of the invention, i.e. the surface on which the light is emitted. This feature does therefore not imply any limitation of the scope of claim 1.

- 2.2 Document D2 (see in particular col. 7, l. 53 - col. 14, l. 16 with figs. 2A-E and col. 20, l. 1 - col. 21, l. 50 and fig. 4E) discloses a laser apparatus comprising a laser light emitting optical system for emitting laser light to a surface ("vertical-cavity surface-emitting laser VCSEL"), a power stabilising system for stabilising the laser light power within a predetermined power interval ("light sensor" 111, 351) and a deflection system for deflecting light reflected from the surface away from the power stabilising system ("beam-splitter 115", "ball lens 543").

In fig. 4E, a bore (503) is dimensioned to receive a light wave guide cable ("optical fibre") (see col. 20, l. 9-17) arranged in the laser light beam path for directing laser light to the surface.

- 2.3 The subject-matter of claim 1 differs from D2 in that the laser light emitting optical system comprises a laser diode emitting a laser beam and a collimating lens being arranged in the laser light beam path.

Accordingly, the subject-matter of claim 1 is new in the sense of Article 33 (2) PCT. As a consequence dependent claims 2-16 also fulfil the requirements of Article 33 (2) PCT.

- 2.4 The problem to be solved by this feature may be seen as providing a compact laser light source.
- 2.5 The skilled person in the field of lasers would review the possible laser sources. He or she knows that a laser diode with a collimating lens is an equivalent to the laser source of document D2 and can be interchanged with that feature where circumstances make it desirable.

Hence, the feature of a laser diode with a collimating lens is merely one of several straightforward possibilities which comes within the scope of the customary practice followed by persons skilled in the art from which the skilled person would select, in



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/DK00/00515

accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.

Consequently, the subject-matter of claim 1 lacks an inventive step (Article 33 (3) PCT).

3. Dependent claims 2-16 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33 (3) PCT), the reasons being as follows.

3.1 Claim 2

For example in D1, the laser light is emitted by a ND:YAG laser at 1064 nm. From the introductory part of D1 (p.1, l. 10-40), the skilled person knows that other wavelengths can be used (for example 514 nm, 647 nm, 694 nm) depending on the specific surgical application.

The skilled person using a laser diode would obviously adapt the wavelength of the emitted laser beam to the specific case without involving an inventive step (Article 33 (3) PCT).

3.2 Claim 3

A diaphragm is a common device used in laser optics. The inclusion of this feature could therefore not involve an inventive step (Article 33 (3) PCT).

3.3 Claims 4 and 5

The power stabilising system of D2 comprises an absorbing means in the form of a silicon photodiode (D2, col. 9, l. 49-52). Also in D1 the power stabilising system is composed of an energy meter (22) absorbing a part of the light emitted from the laser light emitting system related to a computer and the laser power supply to stabilise the laser power output (D1, p. 3, l. 81-88). The energy meter comprises a silicon photodiode as detector (D1, p. 3, l. 124-128).

**3.4 Claims 6, 7 and 8**

The deflection system of D2 (beam splitter 115) comprises a transmission/reflection mirror provided obliquely to the optical axis (D2, col. 8, l. 54 - col. 9, l. 13 and fig. 2A). This mirror transmits the majority of the beam, reflecting only a small portion (D2, col. 12, l. 7-29).

Also the deflection system of D1 (beam splitter 16) comprises a transmission/reflection mirror provided obliquely to the optical axis (D1, p. 6, l. 42-59 and fig. 3A). This mirror transmits the majority of the beam, reflecting only a small portion (0.1%).

**3.5 Claims 9, 10 and 14-16**

The features of these claims merely amount to workshop modifications which come within the scope of customary practice followed by skilled persons without exercise of inventive skills.

**3.6 Claims 11 and 12**

The apparatus of D1 comprises a guide light emitting optical system (aiming or viewing laser 30) (p. 3, l. 92-106) for emitting light to the surface to be treated. This He:Ne laser emits visible light (red light), whereas the ND:YAG laser emits at 1064 nm (infrared, not visible). Implicitly, the wavelength of the guide light is lower than the wavelength of the laser light emitting system.

The skilled person wishing to facilitate the aiming of the laser apparatus will obviously adapt the features of D1 to the specific case and arrive to the claimed subject-matter without involving an inventive step (Article 33 (3) PCT).

**3.7 Claim 13**

In D1, the transmission/reflection mirror (beam combiner 17) is arranged for directing the guide light (p. 6, l. 85-98 and fig.1).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/DK00/00515

**4. Further observations on the international application**

- 4.1** The dependency of claim 15 from claim 14 leads to unclarity concerning the "guide light emitting optical system" (Article 6 PCT). Claim 15 depends on claim 14 which in turn may depend on claim 11. In this case, the claims convey the impression that two guide light emitting optical systems are provided, which is not in line with the description.
- 4.2** This ambiguity could have been solved for example by replacing "further comprises a guide light emitting optical system" in claim 15 by "comprises the guide light emitting optical system".

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>P364 PC00</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/DK 00/ 00515</b>	International filing date (day/month/year) <b>15/09/2000</b>	(Earliest) Priority Date (day/month/year) <b>15/09/1999</b>
Applicant <b>RØNVIG A/S et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

**4. With regard to the title,**

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

**LASER APPARATUS WITH POWER STABILISING AND DEFLECTION SYSTEM**

**5. With regard to the abstract,**

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. The figure of the drawings to be published with the abstract is Figure No.**

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

1



None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/DK 00/00515

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 20-22  
because they relate to subject matter not required to be searched by this Authority, namely:  
Relates to a method of treatment of the human or animal body by therapy Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the apparatus.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK 00/00515

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 H01S5/0683 A61N5/067

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 H01S A61N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 786 837 A (HEWLETT PACKARD CO) 30 July 1997 (1997-07-30) column 2, line 9 - line 19 column 7, line 53 - column 8, line 53 column 14, line 17 - line 32; figures 2A-E abstract	1-22
X	--- DATABASE WPI Section PQ, Week 199610 Derwent Publications Ltd., London, GB; Class P34, AN 1996-096031 XP002901612 & RU 2 036 672 C (UNIV KAZAN TECH), 9 June 1995 (1995-06-09) abstract --- -/--	1-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

27 December 2000

Date of mailing of the international search report

02.04.2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Cilla Lyckman

# INTERNATIONAL SEARCH REPORT

International Application No  
P87/00515

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WO 93 03793 A (BIAGGIO ROBERTO ENZO DI) 4 March 1993 (1993-03-04) abstract</p> <p>-----</p>	1-22

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK 00/00515

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0786837	A	30-07-1997	US 5761229 A	02-06-1998
			US 5771254 A	23-06-1998
			DE 69701537 D	04-05-2000
			DE 69701537 T	11-01-2001
			JP 9219552 A	19-08-1997
-----				
RU 2036672	C	09-06-1995	NONE	
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WO 9303793	A	04-03-1993	AU 2468092 A	16-03-1993
			CA 2116244 A	04-03-1993
			EP 0599966 A	08-06-1994
			JP 6509952 T	10-11-1994
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## INTERNATIONAL SEARCH REPORT

International Application No

PC 00/00515

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01S5/0683 A61N5/067

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01S A61N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 786 837 A (HEWLETT PACKARD CO) 30 July 1997 (1997-07-30) column 2, line 9 - line 19 column 7, line 53 - column 8, line 53 column 14, line 17 - line 32; figures 2A-E abstract	1-22
X	--- DATABASE WPI Section PQ, Week 199610 Derwent Publications Ltd., London, GB; Class P34, AN 1996-096031 XP002901612 & RU 2 036 672 C (UNIV KAZAN TECH), 9 June 1995 (1995-06-09) abstract --- -/--	1-22

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

27 December 2000

Date of mailing of the international search report

02.04.2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Cilla Lyckman

## INTERNATIONAL SEARCH REPORT

Inventor Application No  
PCT/BR 00/00515

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 93 03793 A (BIAGGIO ROBERTO ENZO DI) 4 March 1993 (1993-03-04) abstract -----	1-22

# INTERNATIONAL SEARCH REPORT

International application No.  
CT/DK 00/00515

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 20-22  
because they relate to subject matter not required to be searched by this Authority, namely:  
Relates to a method of treatment of the human or animal body by therapy Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the apparatus.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC / 00/00515

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